**Part 1**

**More Visual Patterns ☺**  Name:

1. Come up with a method that could tell you the number of squares in ANY step.



2. Here’s a combination pattern:



How do the white squares change? How do the black squares change?

How can you describe how many black and white squares there will be in ANY term?

**Part 2**

For each of these patterns, describe a method that could tell you the number of dots, squares, whatever in ANY step!

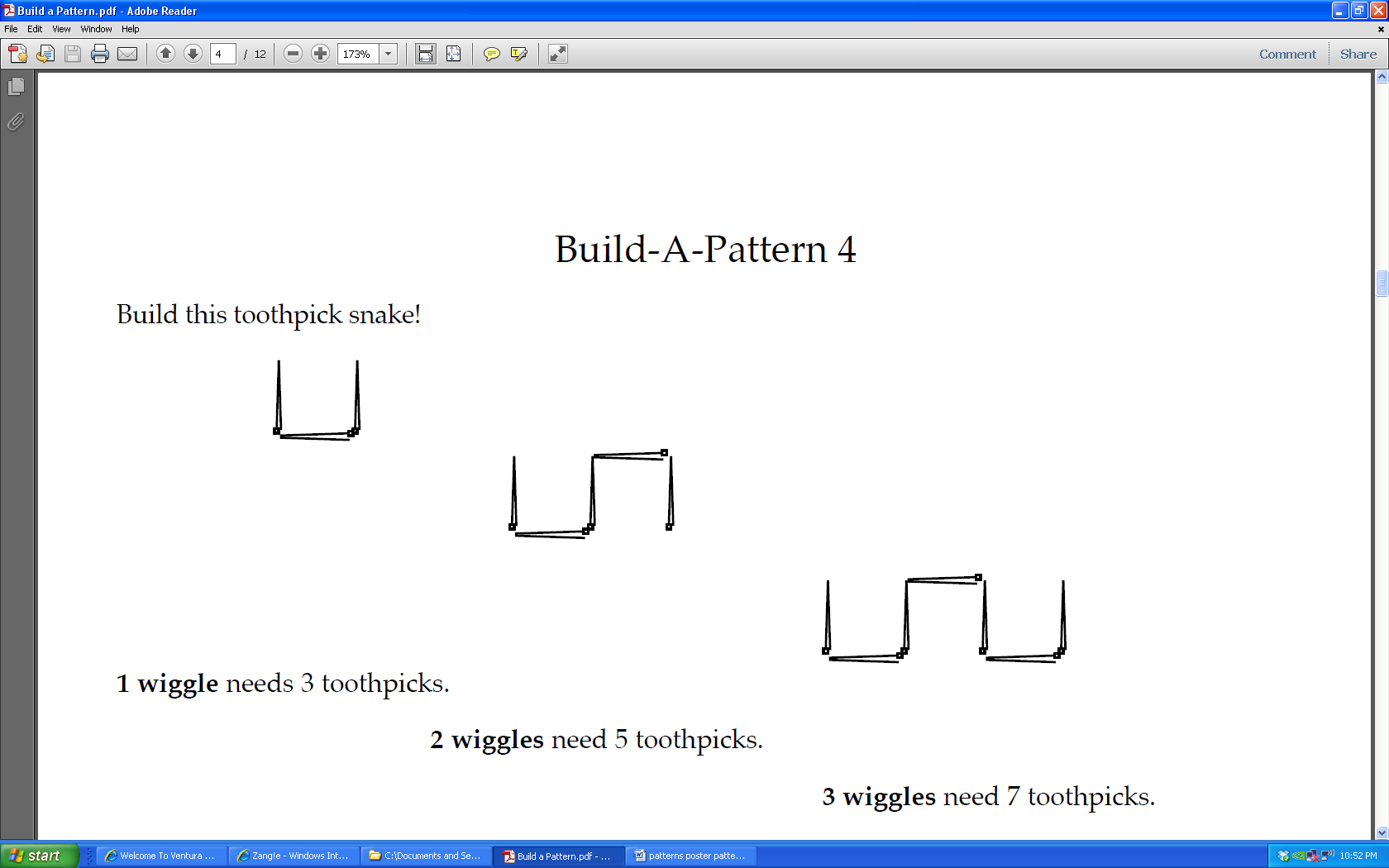
1.



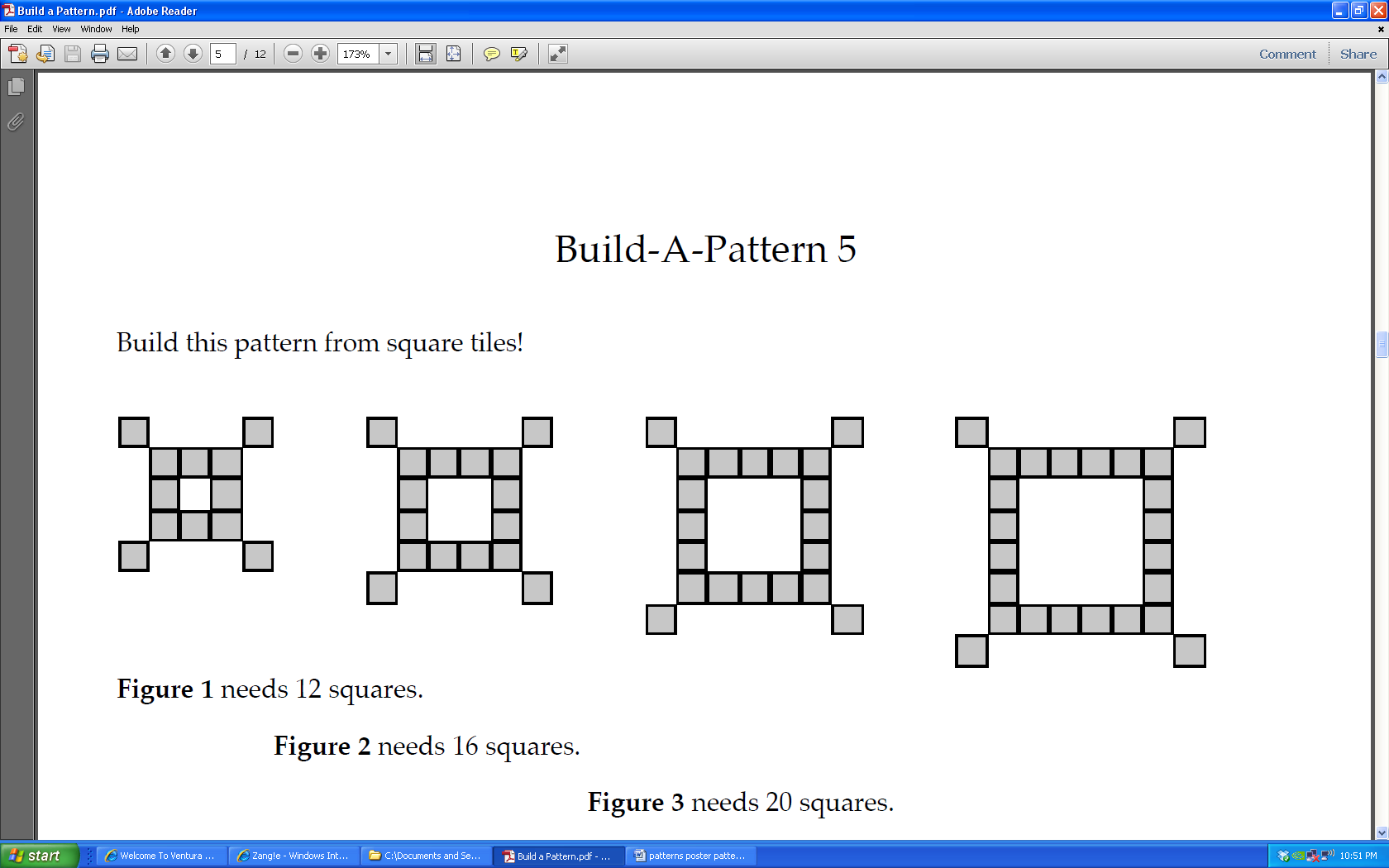
2.



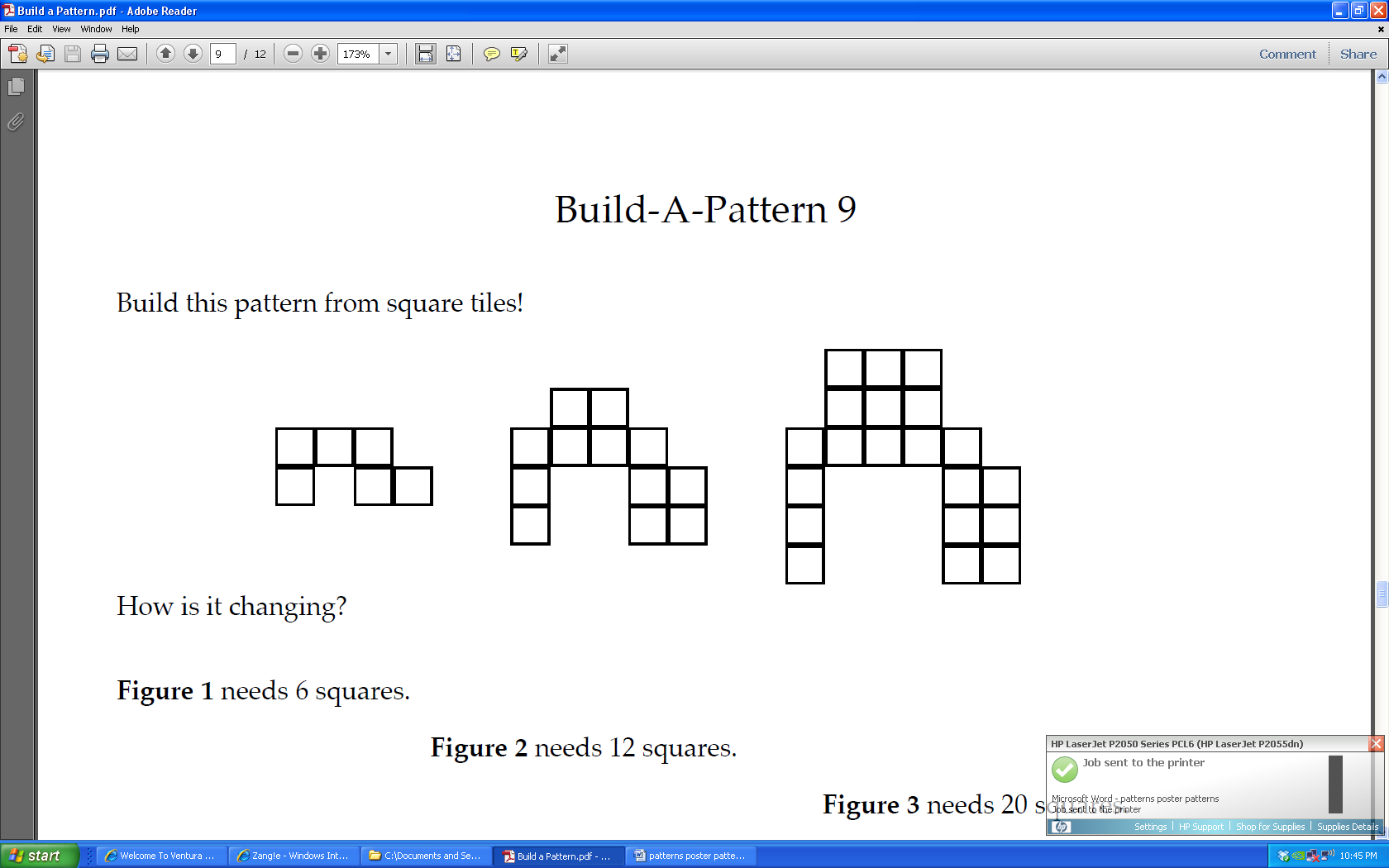
3.



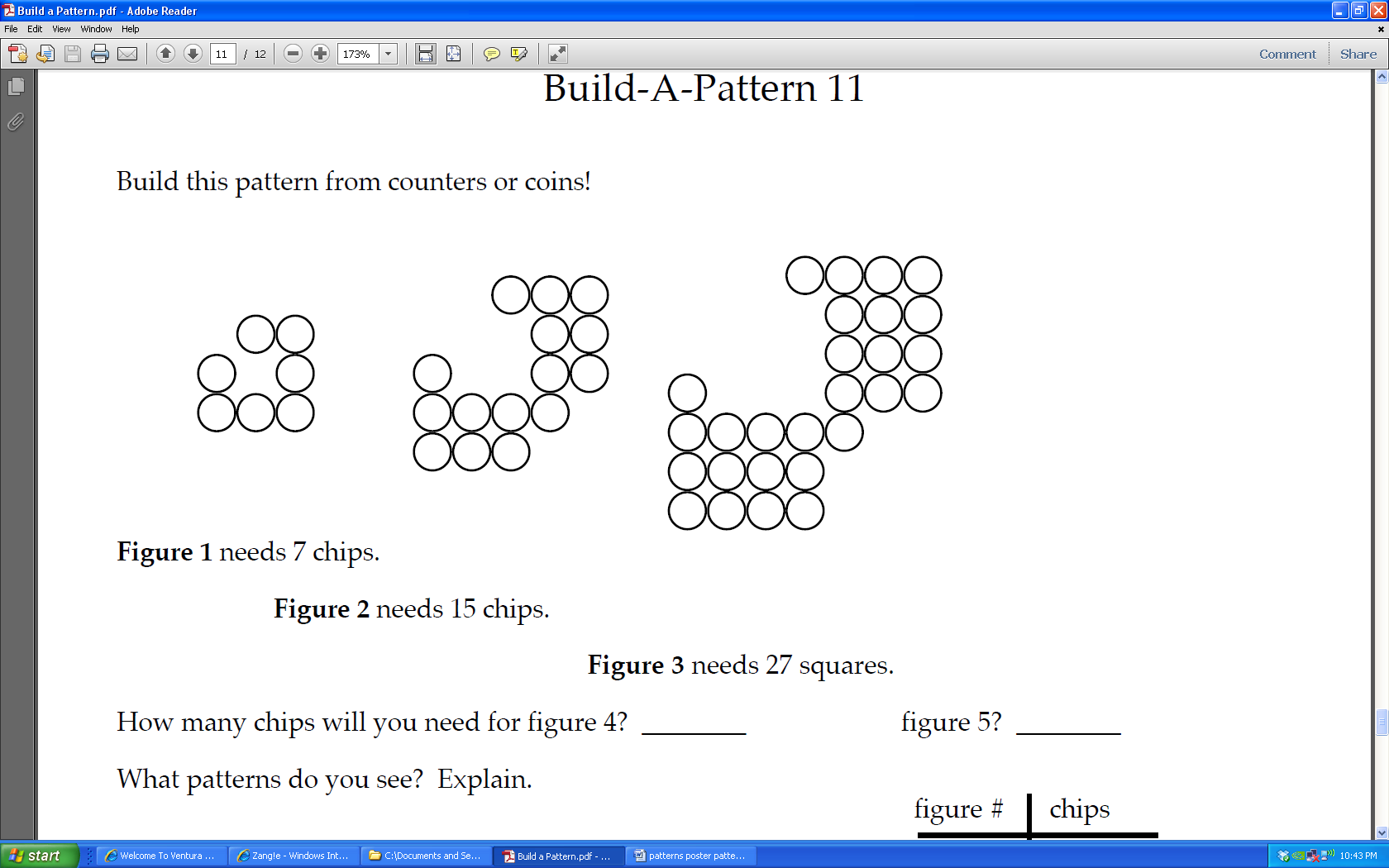
4.



5.



6.



**Part 3** – DO ON SEPARATE PAPER!! THIS WILL BE GRADED!!

Pick your favorite pattern (or the pattern you think you know really well).

Then, write a nice description of the pattern as follows:

- Draw the first 5 terms of the pattern (as the “introduction”).

- Describe how the pattern changes, including using visuals or colors to show specifically how the pattern changes.

- Describe how the 100th term of the pattern will look and why.

- Come up with a method a method that could tell you the number of dots, squares, whatever in ANY step!

\* \* \* You must connect this method to the pattern itself. ***You will not get a lot of credit if you don’t do this, so don’t include a formula if you can’t explain how it comes from the pattern!***

Place for planning:

TIPS:

Here are some good ways to start your writing…

* *I drew/described the 100th term like this because…*
* *I know that the 100th term looks like this because…*
* *I noticed that I could use a method / formula (whichever one you used) to find the number of… in any term of this pattern.*
* *I will now show this formula / method I developed that I could use to find the number of… in any term of this pattern.*
* *Now, if I wanted to know the number of… in a higher term of this pattern, that would be difficult. So, I developed a formula/method…*